First, to rely on a reference under 35 U.S.C. § 103(a), it must be analogous art. MPEP 2141.01(a). The MPEP cites *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993) as an example of analogy in the electrical arts. *Id.* In *Wang*, both the claimed invention and the reference were directed to single in-line memory modules (SIMMs). However, the claimed invention related to dynamic random access memory (RAM) SIMMs used on printed circuit boards in personal computers while the reference related to static RAM SIMMs used in industrial controllers. The *Wang* court held that the finding that the reference was nonanalogous art was supported by substantial evidence. *Id.* 

Here, while both the claimed invention and the Walsh ('746) reference are directed to PTC devices and their use, the claimed invention is directed to PTC devices in *alternating current* HVAC control circuits installed at fixed sites, while the reference is directed to *direct current* use of PTC devices in vehicle systems. See Exhibit A for a schematic diagram of an HVAC control circuit for a Carrier™ Model HP Thermostat, showing an alternating current power source. The difference between the subject matter of the claimed invention and that of the reference provides substantial evidence sufficient to support a finding that the reference is nonanalogous art.

Second, to establish *prima facie* obviousness of a claimed invention, all limitations of the claimed invention must be taught or suggested by the reference. MPEP § 2143.03. Each of applicant's independent claims includes a limitation that the invention is directed to HVAC control circuits. Walsh ('746) neither teaches nor suggests this limitation. The entire disclosure of Walsh ('746) is directed toward utilization of a PTC device in the direct current circuit of an motor vehicle. Walsh ('746) does state, "[s]imilar advantage can be obtained in similar electrical systems, for example those installed in airplanes and ships." *See* Walsh ('746) column 3, lines 26 - 27.

HVAC control circuits differ significantly from the electrical systems of motor vehicles, airplanes and ships, e.g., circuits found in such vehicles typically employ direct current while HVAC control circuits typically employ alternating current. Still further, HVAC control circuits are installed at fixed sites, while the reference discloses use in moving vehicles. See Figure 1 for a schematic diagram of an HVAC control circuit showing the commonly known alternating current power source. Taken in context, Walsh's statement regarding "similar systems" is directed to direct current circuits in vehicle systems.

Finally, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art. MPEP § 2143.01. Here, Walsh's suggestion is limited to "similar systems" which are vehicular and typically employ direct current. Walsh ('746) neither teaches nor suggests the desirability of using PTC devices in HVAC control circuits, typically alternating current circuits installed at fixed sites, as in the claimed invention.

## Probative objective evidence exists which rebuts a prima facie showing of obviousness.

Applicant offers the attached declarations of Mr. Dennis Mitchell (applicant) and Mr. David Munoz as evidence to rebut a *prima facie* showing of obviousness, showing *inter alia* that:

a long-felt persistent need to solve the problem addressed by the claimed invention had been recognized by those of ordinary skill in the art;

elements of the claimed invention were available to those skilled in the art; and those other than the applicant, with motivation to solve the problem addressed by the claimed invention, failed to do so.

Both Mr. Mitchell and Mr. Munoz have worked in the HVAC industry for many years. They both attest to the long felt and persistent need to solve the problems presented by the use of one-shot or manually resettable circuit protection devices and methods in fixed site, alternating current, HVAC control circuits.

Both Mr. Mitchell and Mr. Munoz attest to the fact that while PTC devices were generally available, those other than Mr. Mitchell, with motivation to solve the problem described in Mr. Mitchell's application, failed to arrive at the solution invented by Mr. Mitchell.

In light of the foregoing, Applicant respectfully requests reconsideration, allowance of the claims, and passage to issue of the presently pending claims.

Datad.

Dated: 4/2/99

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